

## Emissions of Greenhouse Gases in the United States 2004

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**Table 17. U.S. Methane Emissions from Natural Gas Systems, 1990 and 1996-2004**

Source	1990	1996	1997	1998	1999	2000	2001	2002	2003	P2004
<b>Million Metric Tons Carbon Dioxide Equivalent</b>										
Production .....	33.8	36.3	38.0	38.4	37.3	39.9	42.0	42.4	42.9	42.8
Natural Gas Processing .....	14.9	16.9	16.4	16.0	16.1	16.4	16.0	15.5	14.4	14.4
Transmission and Storage .....	48.3	48.5	52.1	51.0	52.8	55.4	49.0	55.6	54.7	54.3
Distribution .....	32.0	36.3	37.8	38.5	38.0	39.3	40.0	40.5	41.2	41.2
<b>Total .....</b>	<b>128.9</b>	<b>138.1</b>	<b>144.3</b>	<b>143.9</b>	<b>144.2</b>	<b>151.0</b>	<b>147.0</b>	<b>154.0</b>	<b>153.1</b>	<b>152.6</b>
Natural Gas STAR Reductions ..	0.3	8.3	10.7	12.9	14.5	16.5	19.2	25.9	25.9	27.0
<b>Million Metric Tons Methane</b>										
Production .....	1.47	1.58	1.65	1.67	1.62	1.73	1.83	1.84	1.86	1.86
Natural Gas Processing .....	0.65	0.73	0.71	0.69	0.70	0.71	0.69	0.67	0.63	0.63
Transmission and Storage .....	2.10	2.11	2.27	2.22	2.30	2.41	2.13	2.42	2.38	2.36
Distribution .....	1.39	1.58	1.64	1.67	1.65	1.71	1.74	1.76	1.79	1.79
<b>Total .....</b>	<b>5.60</b>	<b>6.00</b>	<b>6.27</b>	<b>6.26</b>	<b>6.27</b>	<b>6.57</b>	<b>6.39</b>	<b>6.70</b>	<b>6.66</b>	<b>6.64</b>
Natural Gas STAR Reductions ..	0.01	0.36	0.47	0.56	0.63	0.72	0.84	1.13	1.13	1.17

P = preliminary data.

Notes: Data in this table are revised from the data contained in the previous EIA report, *Emissions of Greenhouse Gases in the United States 2003*, DOE/EIA-0573(2003) (Washington, DC, December 2004). Totals may not equal sum of components due to independent rounding. Data for Natural Gas STAR reductions are estimates provided by the EPA, based on annual submissions to the EPA by companies participating in the program, which report activities undertaken to avoid methane emissions from natural gas and petroleum systems.

Sources: National Risk Management Research Laboratory, *Methane Emissions From the Natural Gas Industry*, Vol. 2, Technical Report, GRI-94/0257.1 and EPA-600-R-96-08 (Research Triangle Park, NC, June 1996), Appendix A; American Gas Association, *Gas Facts* (various years); Energy Information Administration, *Natural Gas Annual*, DOE/EIA-0131 (various years); Energy Information Administration, *Monthly Energy Review*, DOE/EIA-0035(2004/07) (Washington, DC, July 2004); Energy Information Administration, *Petroleum Supply Annual*, DOE/EIA-0340 (Washington, DC, various years).